

Amendments to the Claims

Please add new Claims 15-20. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1. (Original) A method for forming microparticles comprising the steps of:
 - a) directing microdroplets of a mixture comprising a biocompatible polymer, a solvent for the polymer and a protein, peptide or small molecule, into a freezing section containing a liquefied gas, whereby the microdroplets freeze; and
 - b) contacting the frozen microdroplets in an extraction section with a liquid non-solvent to extract the solvent into the non-solvent thereby forming said microparticles; wherein the freezing section and extraction section are separated, and the non-solvent is in the liquid state throughout the method.
2. (Original) The method of Claim 1, wherein the biocompatible polymer is biodegradable.
3. (Original) The method of Claim 2, wherein said biocompatible and biodegradable polymer is selected from the group consisting of poly(lactide)s, poly(glycolide)s, poly(lactide-co-glycolide)s, poly(lactic acid)s, poly(glycolic acid)s, polycarbonates, polyesteramides, polyanhydrides, poly(amino acids), polyorthoesters, polycaprolactone, poly(dioxanone)s, poly(alkylene alkylate)s, polyurethanes, blends and copolymers thereof.
4. (Original) The method of Claim 3, wherein the polymer is a poly(lactide-co-glycolide).
5. (Original) The method of Claim 1, wherein the temperature of step (b) is lower than the temperature of step (c).

6. (Original) The method of Claim 1, wherein the liquefied gas is sprayed into the freezing section.
7. (Original) The method of Claim 1, wherein the frozen microdroplets are collected at the bottom of the freezing section and directed into the extraction section.
8. (Original) A method for forming microparticles comprising the steps of:
 - a) directing the microdroplets of a mixture comprising a biocompatible polymer, a solvent for the polymer and a protein, peptide or small molecule, into a freezing vessel containing a liquefied gas, whereby the microdroplets freeze; and
 - b) contacting the frozen microdroplets in an extraction vessel with a liquid non-solvent to extract the solvent into the non-solvent thereby forming said microparticles; wherein the freezing vessel and extraction vessel are separated, and the non-solvent is in the liquid state throughout the method.
9. (Original) The method of Claim 8, wherein the biocompatible polymer is biodegradable.
10. (Original) The method of Claim 9, wherein said biocompatible and biodegradable polymer is selected from the group consisting of poly(lactide)s, poly(glycolide)s, poly(lactide-co-glycolide)s, poly(lactic acid)s, poly(glycolic acid)s, polycarbonates, polyesteramides, polyanhydrides, poly(amino acids), polyorthoesters, polyacetals, polycyanoacrylates, polyetheresters, polycaprolactone, poly(dioxanone)s, poly(alkylene alkylate)s, polyurethanes, blends and copolymers thereof.
11. (Original) The method of Claim 8, wherein the polymer is a poly(lactide-co-glycolide).
12. (Original) The method of Claim 8, wherein the temperature of step (b) is lower than the temperature of step (c).

13. (Original) The method of Claim 8, wherein the liquefied gas is sprayed into the freezing vessel.
14. (Original) The method of Claim 8, wherein the frozen microdroplets are collected at the bottom of the freezing vessel and directed into the extraction vessel.
15. (New) The method of Claim 1, wherein the protein, peptide or small molecule is dissolved in the mixture.
16. (New) The method of Claim 1, wherein the protein, peptide or small molecule is suspended in the mixture.
17. (New) The method of Claim 1, wherein the protein, peptide or small molecule forms an emulsion in the mixture.
18. (New) The method of Claim 8, wherein the protein, peptide or small molecule is dissolved in the mixture.
19. (New) The method of Claim 8, wherein the protein, peptide or small molecule is suspended in the mixture.
20. (New) The method of Claim 8, wherein the protein, peptide or small molecule forms an emulsion in the mixture.